Pushing the Envelope			
2006 Science			
Content and Achievement Standards			
North Dakota Science			
Grade 5			
Activity/Lesson	**State**	**Standards**	
Types of Engines (pgs. 11-23)	ND	SCI.5.5.3.4	Identify the effects force and mass have on the motion of an object
Physics and Math (pgs. 43-63)	ND	SCI.5.5.3.4	Identify the effects force and mass have on the motion of an object
Rocket Activity (pgs. 69-75)	ND	SCI.5.5.3.4	Identify the effects force and mass have on the motion of an object
Pushing the Envelope			
2006 Science			
Content and Achievement Standards			
North Dakota Science			
Grade 8			
Activity/Lesson	**State**	**Standards**	
Chemistry (pgs. 25-41)	ND	SCI.8.8.3.1	Identify elements and compounds
Chemistry (pgs. 25-41)	ND	SCI.8.8.3.2	Explain the relationship between phases of matter and temperature
Physics and Math (pgs. 43-63)	ND	SCI.8.8.3.3	Interpret the effect of balanced and unbalanced forces on the motion of an object (e.g., convection currents, orbital motion, tides)
Rocket Activity (pgs. 69-75)	ND	SCI.8.8.3.3	Interpret the effect of balanced and unbalanced forces on the motion of an object (e.g., convection currents, orbital motion, tides)
Pushing the Envelope			
2006 Science			
Content and Achievement Standards			
North Dakota Science			
Grades 9-10			
Activity/Lesson	**State**	**Standards**	
History of Aviation Propulsion (pgs. 5-9)	ND	SCI.9-10.9-10.8.4	Identify theories that have changed over time (e.g., alchemy, atomic structure, model of the solar system)
Chemistry (pgs. 25-41)	ND	SCI.9-10.9-10.1.4	Describe the relationship between form and function (e.g., solids, liquids, gases, cell specialization, simple machines, and plate tectonics)
Physics and Math (pgs. 43-63)	ND	SCI.9-10.9-10.3.7	Use Newton’s Laws to describe the motion of an object
Rocket Activity (pgs. 69-75)	ND	SCI.9-10.9-10.3.7	Use Newton’s Laws to describe the motion of an object
Pushing the Envelope			
2006 Science			
Content and Achievement Standards			
North Dakota Science			
Grades 11-12			

Activity/Lesson	State	Standards	
Types of Engines (pgs. 11-23)	ND	SCI.11-12.11-12.3.8	Identify the principles and relationships influencing forces and motion (e.g., gravitational force, vectors, velocity, friction)
Physics and Math (pgs. 43-63)	ND	SCI.11-12.11-12.3.8	Identify the principles and relationships influencing forces and motion (e.g., gravitational force, vectors, velocity, friction)
Rocket Activity (pgs. 69-75)	ND	SCI.11-12.11-12.3.8	Identify the principles and relationships influencing forces and motion (e.g., gravitational force, vectors, velocity, friction)